IN THE UNITED STATES PATENT AND TRADEMARK OFFICE Before the Board of Patent Appeals and Interferences

In re Patent Application of

SIMPSON et al

Serial No. 10/088,541

Filed: March 19, 2002

Title: METHOD FOR COMPUTER SECURITY

Mail Stop Appeal Brief - Patents

Commissioner for Patents

P.O. Box 1450

Sir

Alexandria, VA 22313-1450

applicant's claim(s).

Atty Dkt. SCS-124-928

C# M#

Confirmation No. 6928

TC/A.U.: 2132

Examiner: B. Lanier

Date: January 22, 2008

Correspondence	Address	Indication	Form	Attached.
NOTICE OF APPEAL				

from the last decision of the Examiner twice/finally rejecting

Applicant hereby appeals to the Board of Patent Appeals and Interferences

JAN 2 2 2008

An appeal <b>BRIEF</b> is attached in the pending appeal of the above-identified application	\$510.00 (1402)/\$255.00 (2402)	\$
Credit for fees paid in prior appeal without decision on merits		-\$ (

-		
$\boxtimes$	A reply brief is attached.	(no fee)

Petition is hereby made to extend the current due date so as to cover the filing date of this paper and attachment(s)

One Month Extension \$120.00 (1251)/\$60.00 (2251)

Two Month Extensions \$460.00 (1252)/\$230.00 (2252)

Three Month Extensions \$1050.00 (1253/\$525.00 (2253)

Four Month Extensions \$1640.00 (1254/\$820.00 (2254)

☐ "Small entity" statement attached.

Less month extension previously paid on

-\$( )

TOTAL FEE ENCLOSED \$

\$510.00 (1401)/\$255.00 (2401) \$

0.00

)

# CREDIT CARD PAYMENT FORM ATTACHED.

Any future submission requiring an extension of time is hereby stated to include a petition for such time extension. The Commissioner is hereby authorized to charge any <u>deficiency</u>, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our **Account No. 14-1140.** A <u>duplicate</u> copy of this sheet is attached.

901 North Glebe Road, 11th Floor Arlington, Virginia 22203-1808 Telephone: (703) 816-4000 Facsimile: (703) 816-4100

SCS:kmm

NIXON & VANDERHYE P!

By Atty: Stanley C. Spoop

Signature:



# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE Before the Board of Patent Appeals and Interferences

In re Patent Application of

SIMPSON et al

Atty. Ref.: SCS-124-928

Serial No. 10/088,541

TC/A.U.: 2132

Filed: March 19, 2002

Examiner: B. Lanier

For:

METHOD FOR COMPUTER SECURITY

\* \* \* \* \* \* \* \* \* \*

January 22, 2008

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

#### REPLY BRIEF

The following comments respond specifically to arguments made by the Examiner in the "Response to Argument" portion of the Examiner's Answer mailed November 21, 2007, as the remaining portion of the Examiner's Answer appears to be a verbatim copy of the Final Rejection and is thus fully responded to in the previously filed Appeal Brief.

The Examiner's responses to the arguments appear to be in order and directed to the Appeal Brief section A, subheadings 1-8. However, there appears to be no response to the remaining arguments made in Appellants' Appeal Brief, i.e., in sections B-H. The Examiner's failure to respond to the Appeal Brief sections B-H is taken as an admission that the Examiner has no response to those arguments. Appellants will address the alleged "Response to Argument" referencing argument A(1) to A(8) as follows.

### 1. Rebuttal to the Examiner's response to Brief section A(1)

On page 18, in the first paragraph under section 10 "Response to Argument," the examiner alleges that Appellants' Brief argument beginning on page 24 "is not persuasive because Baker discloses that a plurality of users have been placed in different classes (Col. 4, lines 47-51) for the purpose of delegating access control to data (Col. 4, lines 51-56 & Col. 5, lines 6-12)."

Baker does NOT disclose users placed in different classes: users may be in different classes but they are not placed in them by Baker because they are pre-existing. Baker does not place a parent in a parent class because the parent is already there. This distinction is important because Appellants' invention is directed inter alia to situations in which individual persons are allocated to (or placed in) classes or groups defined by the implementing computer system. For example, an individual may be allocated by the computer system to a customer group and thereafter obtain access to all data available to all other members of that group.

Unlike Baker and the alleged parent, student etc. groups, the individual person is given no access whatsoever to data until he or she has been allocated by the computer system to a human user group defined by the computer system, not by parenthood etc. which is independent of the computer system.

The Examiner also alleges that "[i]t is clear when Baker states . . . that human computer users are being discussed . . . ." Baker does NOT disclose human users allocated to different classes: users may be in different classes but they are NOT

allocated to them by Baker and Baker does not disclose recognition of their class instead of each human user's identity. This is yet another suggestion by the Examiner that Baker discloses something that it clearly does not. The whole point of Appellants' invention is that it replaces recognition of each individual person's identity with recognition of a group identity common to multiple group members.

Baker could be modified to deal with users in different classes or groups, but, absent the hindsight afforded by knowledge of Appellants' invention, such modification must be based on what Baker actually discloses - computer terminal IDs or a unique password for each individual person. To adapt Baker for use with groups, a group might be given access to computer terminals enabled to have access to information appropriate to that group: e.g. teachers use terminals having access to all data, but students use terminals having access to limited types of data only – however this is not the claimed invention.

Baker mentions a unique password for each individual group member and by combining Baker column 4 lines 36-46 with column 4 lines 47-49, it can be inferred that a class of users would be defined simply as a list of individual persons' identities/ passwords, because nothing else is disclosed by Baker: i.e. groups are defined by lists of all of the different unique passwords of the groups members. This is quite different to Appellants' invention, which uses the same identifier for all members of a group, not different identifiers for different members.

## 2. Rebuttal to the Examiner's response to Brief section A(2)

In attempting to rebut this portion of the Appellants Brief beginning on page 25, the Examiner suggests on page 19, lines 3 and 4, that "Baker discloses authentication of actual users and/or user terminals (Col. 4, lines 48-49)."

Baker does NOT disclose authentication of actual users and/or user terminals.

Baker's col. 4, lines 48-49 discloses the possibility of modifying Baker to recognize classes of users and/or user terminals but does not teach how this could be accomplished.

As has been noted above, Baker discloses computer terminal IDs and unique passwords for individual persons, so recognition can be inferred as consisting of checking a list of computer terminal IDs or unique passwords. A computer terminal ID or a unique password is not authenticated evidence, it is merely evidence that the ID or password has been obtained, perhaps by illicit means. Authenticated evidence is evidence which has gone through a process of authentication before it is submitted to a computer system such as Baker by a person requiring data access.

# 3. Rebuttal to the Examiner's response to Brief section A(3)

The Examiner alleges that the Appeal Brief argument sub-section (3) beginning on page 26, is not persuasive "because Baker discloses that the relational database would include a listing of director and/or subdirectory identifiers that a particular user or user group would be granted or denied access to (Col. 5, lines 10-12)." (First full paragraph on page 19 of the Examiner's Answer).

Baker, at Col. 5, lines 10-12, statement "listing of directory and/or subdirectory identifiers that a particular user or user group would be granted or denied access to" is not a disclosure of dataset access categories. Instead, it is a disclosure of distinguishing items of data to which access is granted or denied on the basis of their location in a database.

The above distinction is <u>important</u> because Appellants' invention is usable inter alia with data labeled with its dataset access category and to determine whether or not access is to be granted on the basis of that labeling.

Unlike Baker, Appellants' invention does not distinguish between items of data to which access is granted or denied on the basis of such items' locations in a database. Indeed, it is an important advantage of Appellants' invention over Baker that it is not data location dependent, because databases (particularly Internet accessible databases) are normally organized and indexed on a subject matter basis. Such security cannot be relied on to have directories and/or subdirectories which are split into different sections accessible by different users or groups.

# 4. Rebuttal to the Examiner's response to Brief section A(4)

The Examiner's allegation in the paragraph bridging pages 19 and 20 of the Examiner's Answer appears to be an attempt to mislead and/or prejudice the Board's understanding of the claimed invention. The Examiner alleges that Appellants Brief, in subsection (4) beginning on page 27, has admitted that "Baker discloses use of a personal password unique to an individual (i.e., human user) for authentication."

In fact, what Appellants' Appeal Brief said was that the Baker disclosure "merely discloses use of a personal password unique to an individual . . . ." Appellants made no admission with respect to the personal password providing "authenticated evidence of membership" (emphasis added) which is also required by the independent claims.

Baker's disclosure of use of a personal password unique to an individual human user is completely irrelevant to the patentability of Appellants' invention, which not only does not use passwords but even declares the same to be prior art (see Appellants' specification at page 1 line 20 to page 2 line 2, where passwords are subsumed in the expression "identity indicators").

Indeed, it is a major advantage of Appellants' invention that such personal passwords unique to individuals are rendered unnecessary, because they are onerous when large numbers of individuals are involved (see Appellants' specification at page 1 lines 28 to 30).

The Examiner goes on to allege in the sentence bridging page 19 and 20 of the Examiner's Answer, that page 553 provides the requisite teaching of the claim limitation and that page 548 suggests the requisite motivation for combining teachings. This contention by the Examiner is respectfully traversed, as the Examiner did NOT provide the requisite citations in the Final Office Action mailed 31 January 2007 in the last paragraph of page 4 to the first paragraph on page 5 which refers to Davis. Again, the Examiner incorrectly suggests that the issue is <u>authenticating an individual user</u>, which is quite wrong and confuses authentication of a system user's identity with <u>authentication of a user group's identity</u>. Authenticating a system user's identity is

irrelevant because Appellants' claimed invention <u>does not</u> need do this. As has been previously noted, Appellants' invention <u>avoids</u> the need to identify an individual requiring access to data, and instead identifies and authenticates the <u>group</u> to which such an individual has been allocated by Appellants' invention.

Furthermore, the Examiner's indicated citation in the Final Office Action pages 4/5 is Davis, and Davis uses a certificate to authenticate a single human user, <u>not</u> a group: in this regard see Davis page 553, heading B. Access Server Model, where a (single human) user Jane Baker requires access in the second paragraph, and in the fourth paragraph the access server verifies (or authenticates) the individual user's identity (not that of a group) using the public key in the user's Certificate.

#### 5. Rebuttal to the Examiner's response to Brief section A(5)

The Examiner alleges that the Appeal Brief argument of subsection (5) beginning on page 28 is "not persuasive because the Examiner did provide a 'reason/motivation' for the proposed Baker/Davis combination in the Final Office Action."

The cited portion of the Davis reference at page 548 under heading B fails to disclose Appellants' invention because Davis relates to verifying (or authenticating) an individual user's identity, not that of a group, and so Davis does not remedy Baker's deficiencies, i.e., failures to disclose:

a) allocating users to groups, or

b) access to a dataset in response to a user group member providing authenticated evidence of membership of a user group with an appropriate dataset access category.

Moreover, Baker does not rely on evidence of user group membership and therefore has no reason to authenticate an user group membership. Consequently, absent the hindsight afforded by knowledge of Appellants' invention, there is no motivation in Baker to search for authentication of evidence of user group membership in Davis or any other reference. Moreover, Baker discloses identification by unique password, not public key/private key identification and thus would lead those of ordinary skill away from the claimed invention.. Baker and Davis are therefore not properly combined.

## 6. Rebuttal to the Examiner's response to Brief section A(6)

The Examiner alleges in the paragraph bridging pages 20 and 21 of the Examiner's Answer, that the Appeal Brief argument (in subsection (6) beginning on page 29) is not persuasive "because the claims require 'providing authenticated evidence of membership of that user group' and Davis discloses (Page 553) a user request access to an object . . . ." This allegation by the Examiner is also simply incorrect.

The Examiner appears to be taking an element from Appellants' claimed invention which is not disclosed in Davis and simply arguing that it is disclosed in Davis and therefore Davis supports the argument. This circular reasoning on the Examiner's part simply has nothing to do with the rejection of claims based upon obviousness.

Specifically, the Examiner has simply taken the phrase "and the user group" (see line 2, page 21 of the Examiner's Answer) from Appellants' invention and added it to Davis. As previously shown, Davis (page 553, heading B. Access Server Model) discloses a single human user, Jane Baker, requiring access in the second paragraph, and in the fourth paragraph the access server verifies or authenticates the individual user's identity using the public key in the user's Certificate. Davis has no disclosure of giving dataset access in response to "authenticated evidence" of group membership in a "user group." The examiner has simply invented all teachings in which Davis discloses a "user group."

# 7. Rebuttal to the Examiner's response to Brief section A(7)

The Examiner alleges this portion of the Appeal Brief (subsection (7) also beginning on page 29) is not persuasive because "Davis discloses that the verification data in the signed request is directly linked to the 'userClass' which identifies the user groups allowed access to the restricted object (Page 553, Section B)."

Here, the Examiner selectively omits reference to those parts of Davis which contradict his argument, and then misinterprets the rest of Davis. Davis states (page 553, heading B. Access Server Model, fourth paragraph) that "[t]he access server retrieves the public key from the user's Certificate which it received from the LDAP response and uses it to verify the identity of the user sending the request. If the user is verified . . . ." Thus it is abundantly clear that Davis verifies or authenticates the individual user's identity, not a user group membership.

Turning now to the Examiner's suggestion that Davis discloses verification data in the signed request being directly linked to the "userClass" (Examiner's Answer page 21, lines 5-8) which purportedly identifies the user groups allowed access to the restricted object, this is misleading.

The "userClass" has nothing whatsoever to do with verification of identity in Davis. Davis (page 553, heading B. Access Server Model, fourth paragraph, second sentence) states "If the user is verified, the access server compares the returned userClass string to the groups allowed access to the requested object". This extract makes it entirely clear that the identity verification or authentication step is carried out before and independently of use of the userClass string, which appears merely to indicate the equivalent of a dataset access category which Appellants do not claim to be novel. Also, were the userClass to be used to identify a user group membership, Davis' verification or authentication of an individual user's identity would be entirely unnecessary.

## 8. Rebuttal to the Examiner's response to Brief section A(8)

As previously stated herein and as indicated in the Appeal Brief, the Baker/Davis combination fails to anticipate Appellants' invention because Davis relates to verifying (or authenticating) an individual user's identity, not that of a group, and so Davis cannot remedy Baker's deficiencies of failure to disclose:

a) allocating users to groups, or

b) access to a dataset in response to a user group member providing authenticated evidence of membership of a user group with an appropriate dataset access category.

Furthermore, Hsiao does not remedy these deficiencies either. Hsiao does not disclose allocating users to groups or authenticated evidence of membership of a user group. The only extract from Hsiao of the remotest relevance is col. 5 lines 39-42 relating to meta data. Hsiao does not even disclose meta tags. Consequently, since the Baker/Davis combination fails to anticipate Appellants' invention, the Baker/Davis/Hsiao combination also fails to anticipate Appellants' invention.

There is no motivation to combine Hsiao with Baker and Davis. Baker is predicated on a fundamental assumption that control of access to data will be adequate if access to databases or directories or subdirectories is restricted: i.e. Baker either does or does not give access to databases or directories or subdirectories according to their location. There is no disclosure of individual items within a directory being labeled to indicate access restriction and access being granted or denied based on the individual item's label. Consequently there is no motivation in Baker to search for a data item labeling technique, and indeed Hsiao does not disclose labels in the form of meta tags. Appellants would observe that motivation for combining Baker with any other reference must flow from Baker as the primary reference, not from anything in Hsiao.

The Examiner alleges on page 21, lines 10-11, that "Appellant has failed to point out how Hsiao fails to meet the claim limitations." This is incorrect and the Examiner's attention is directed to the Appeal Brief under section B on page 31, second paragraph, in

which it is noted that "at no point in the Final Rejection does the Examiner contend that the Hsiao reference supplies any feature, logic or method step which, as discussed above, is missing from the Baker and Davis references." As a result, the Brief correctly concludes that, Hsiao, even if combined with Baker and Davis, could not disclose the subject matter claimed.

The Examiner now attempts to argue that "it is well known and practiced in the art to associate meta data with tags on documents to be stored in a database system" and that this somehow discloses what is missing from the cited references.

Inasmuch as this is the first instance where the Examiner suggests that the feature missing in the Baker/Davis/Hsiao combination is somehow well known, Appellants cite the Manual of Patent Examining Procedure (MPEP) Section 2144.03 and respectfully traverses the Examiner's assertion that the same is well known and practiced in the art. As required by the MPEP, the Examiner must cite a reference in support of his or her position. Because this is the first argument that the missing feature are "well known and practiced in the art," Appellants are entitled to traverse the allegation of "well known."

In view of the above, the Examiner's limited response to the bases of rejection set out in the Appellants' Brief is simply a defective Examiner's Answer. Consequently, in view of the Appellants contention that each of the Examiner's rebuttals to the eight subsections in section A of the Brief are without support in the cited references and the Examiner's apparent admission that sections B-H of the Brief are correct, it is submitted that there is simply no supportable basis for rejecting claims 1-45 under 35 USC §103.

SIMPSON et al Serial No. 10/088,541

Thus, and in view of the above, the rejections of claims 1-45 are clearly in error and reversal thereof by this Honorable Board is respectfully requested.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By:

Stanley C. Spooner Reg. No. 27,393

SCS:kmm 901 North Glebe Road, 11th Floor Arlington, VA 22203-1808

Telephone: (703) 816-4000 Facsimile: (703) 816-4100